

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's argues Goldman discloses only one broadcast time range (i.e., the 8:00 to 8:30 range) contains viewership information. Thus, Goldman does not teach or suggest displaying... **within at least two broadcast ranges of the two dimensional grid guide format,"** as recited by Claim 1 (page 11, paragraph 2). This argument is respectfully traversed.

It's noted that the claims does not recite displaying statistical data for/in each of the programs in the two broadcast time ranges program guide. Instead, the claim recites "displaying the statistical data relative to individual programs within at least two broadcast time ranges of the two-dimensional grid guide format." This recited feature is read on Goldman's disclosure of displaying the statistical data (206) (208) relative to individual programs within at least two broadcast time ranges of the two-dimensional grid guide format such as programs in time ranges 8:00-8:30 and 8:30-9:00 (figure 4) or any prior art that discloses displaying statistical data (e.g., whether the program have been viewed/watched or whether program have selected to recorded/scheduled to recorded) relative to programs within at least two broadcast time ranges of the two-dimensional grid guide (see for example, Sai reference).

It is further noted that the Examiner need not give patentable weight to non functional descriptive material absent a new and unobvious functional relationship between the descriptive material and the substrate. See *In re Lowry*, 32 F.3d 1579, 1583-84 (Fed. Cir. 1994); *In re Ngai*, 367 F.3d 1336, 1338 (Fed. Cir. 2004) and BPAI recent final decision in *Ex parte Curry*, 2005-0509 (BPAI 2005), 84 USPQ2d 1272 (Affirmed, Rule 36, Fed. Cir., slip op. 06-1003, June 2006). In this case, the limitation "displaying statistical data relative to individual programs within at least two broadcast time ranges..." are drawn to descriptive material not functionality related to the method. Thus, the Examiner does not need to give patentable weight to nonfunctional descriptive material, as it "will not distinguish the invention from the prior art in terms of patentability." *In Re Nga*, at 1339. Regardless of whether the combination of the references teach "statistical data displayed superimposed relative to individual programs within at least two broadcast time ranges" or any broadcast time ranges, the limitation will not differentiate the claimed invention from the prior art.

Nonetheless, the Examiner has found that the teaching displaying the statistical data in superimposed fashion includes displaying the statistical data relative to individual programs within at least two broadcast time ranges of the two-dimensional grid guide format." In particular, Ellis is relied on for the teaching of superimposing (see office action mailed 12/02/2009, pages 3, 5). The feature of "two-dimensional grid guide format" is already taught by Goldman. Goldman further discloses displaying the statistical data relative to individual programs within the grid guide format for the EPG (e.g., viewership or percentage of viewing popularity are displayed in relative to

Art Unit: 2424

individual programs and/or channels within the grid guide format of the EPG - see include, but not limited to, figures 2-6, paragraphs 0052-0054). Goldman further discloses the two-dimensional grid guide format defines at least two broadcast time ranges in a first dimensional (e.g., 8:00-8:30, 8:30-9:00, 9:00-9:30 – figure 4) and displaying the statistical data includes displaying the statistical data relative to individual programs within at least two broadcast time ranges of the two-dimensional grid guide format (e.g., displaying statistical data relative to individual program such as "Survivor", "Nova", etc. and these programs are on two dimensional program guide and within at least two time ranges of the grid program guide or displaying statistical data 208 on the right/within the programs in first time ranges and on the left/outside programs of second time ranges - see include, but not limited to, figure 4).

In addition, Ellis also discloses the feature of "two-dimensional grid guide format" (for example, time in one dimension and channel on another dimension –figure 20b, paragraph 0112; or US 2005/0204387 (referred to as K387): figures 18, 24, 98, 102 (E387 is continuation of 09,357,941 and 09357941 is incorporated by reference in its entirety in E744-see E744: paragraph 0068). Ellis further discloses program guide data and other data (e.g., recommendation) are displayed in superimpose fashion.

With respect to Applicant's argument regarding claim 3 (pages 11-12), the examiner respectfully disagrees.

Goldman discloses statistical data include number of viewers/selections for each program (figure 4). Thus, the audience rating of program during the broadcast program must be obtained using the number of users of said user terminals which transmitted...

Art Unit: 2424

so that the number of users is displayed with the program. Applicant is also suggested to refer to Ellis (20030020744:paragraphs 107-108 or Thomas (incorporated by reference in Ellis): paragraphs 0063-0066, 0070-0076) for this teaching.

Therefore, the combination of Goldman and Ellis disclose all features as recited in the claims.

It is further noted that the specification does not clearly defines "a computer readable medium...." recited in claim 23 comprises only statutory subject matter (non-transitory embodiment). The computer readable medium that covers both transitory and non-transitory embodiments must be rejected under 101 (see MPEP 2111.01 and memo signed by director David Kappos on 1/26/2010).

For the reasons given above, rejections of claims 1-24 are analyzed as discussed below.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 22-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 23 recites "a computer readable medium..." is directed to non-statutory subject matter since the specification does not define the computer readable medium covers only non-transitory embodiment (see MPEP 2111.01 and memo signed by director David Kappos on 1/26/2010).

Claim 22 is rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. The claimed method comprising acquiring..., is broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent. For example, acquiring program guide data and statistical data from newspaper/magazine, the user generating an EPG by writing program guide data on a piece of paper and the statistical data superimposed on the program guide data, the program guide data on the piece of paper has at least two time ranges.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2424

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman (US 2002/0112239 A1) in view of Ellis et al. (US 2003/0020744 A1 – referred as Ellis).

Note: US 2005/0149964 A1 (referred as Thomas), US 2005/0204388 A1 (referred as Knudson), US 2003/0149988 A1 (referred as E988), US 2005/0204387 A1 (referred as K387) are incorporated by reference in Ellis in their entireties (see Ellis - paragraphs 0068, 0092, 0098, 0102, 0104, 0107, 0108). All references incorporated by reference in their entirety in Ellis are treated as part of Ellis' specification.

Regarding claim 1, Goldman discloses a data processing apparatus (figure 2) that performs data processing to generate an EPG (Electronic program guide) to be displayed on a display (e.g., EPG generator performs data processing to generate an EPG to be displayed on television screen - figures 2, 4-6), comprising:

program guide data acquiring means for acquiring program guide data that gives guidance on programs (e.g., device at clearinghouse system or at local facility or at home entertainment system for acquires program guide data to generate an EPG to be displayed on television screen - see include, but are not limited to, figures 2-6, paragraphs 0022-0024, 0033-0034, 0042, 0051);

statistical data acquiring means for acquiring statistical data representing degrees of interest in the programs (e.g., device/component for acquiring/gathering viewing behavior statistics, or viewer activity associated with television programs – see include, but are not limited to, figures 2-6, paragraphs 0021-0022, 0025-0028);

EPG generating means for generating an EPG in which the program guide data and the statistical data are displayed as two-dimensional grid guide format, the statistical data are displayed relative to individual programs within the two-dimensional grid guide format of the EPG (EPG generator for generating an EPG in which program guide data such as channel number, title, etc. and statistical data such as viewership, percentage of viewing popularity, are displayed as two-dimensional grid guide format in relative (right/within or left/outside) individual programs within the two dimensional grid guide format of the EPG- see include, but are not limited to, figures 2-6, paragraphs 0052-0054), wherein the two-dimensional grid guide format defines at least two broadcast time ranges in a first dimension (e.g., 8:00-8:30, 8:30-9:00 - figure 4), and displaying includes displaying the statistical data includes displaying the statistical data relative to individual programs within at least two broadcast time ranges of the two-dimensional grid guide format (e.g., displaying statistical data relative to individual program such as "Survivor", "Nova", etc. and these programs are on two dimensional program guide and within at least two time ranges of the grid program guide or displaying statistical data 208 on the right/within the programs in first time ranges and on the left/outside programs of second time ranges - see include, but not limited to, figure 4).

Goldman further discloses different ways to display statistical data/viewership information and program guide data (paragraph 0054). However, Ellis does not explicitly disclose the teaching of displaying data in superimposing fashion.

Art Unit: 2424

Ellis discloses program guide data and other data are superimposed/overlaid (see include, but are not limited to, figures 20a-20b, paragraph 0112; K387: figures 18, 24, 98, 102). Thus, Ellis discloses displaying data in superimposing fashion relative to individual programs (see also discussion in "response to arguments" above. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Goldman with the teaching of superimposing fashion as taught by Ellis in order to yield predictable results such as displaying simultaneously different contents on the screen in larger windows thereby allowing the user to view different content on a display easily.

Regarding claim 2, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman further discloses the statistical data includes at least one of a numbers of persons who viewed a program during a broadcast time thereof, an audience rating (real time rating) of the program during the broadcast time thereof... (see include, but are not limited to, figure 4, paragraphs 0052-0054).

Regarding claim 3, Goldman in view Ellis discloses the data processing apparatus as discussed in the rejection of claim 2. Goldman in view of Ellis further discloses the statistical data is obtained on the basis of information transmitted from user terminals of users (statistical data including real time rating data, viewing information, etc. is obtained from user terminals of users - see include, but are not limited to, Goldman:



Art Unit: 2424

figure 2, paragraphs 0009-0010, 0022, 0043; Ellis: paragraphs 0107-0108; Thomas, paragraphs 0070-0076);

the audience rating (real time rating, viewer preferences, or viewer behavior, or viewer activity, etc.) of program during the broadcast time thereof is obtained using the number of users of the user terminals which transmitted the information a predetermined number of time or more within a predetermined period (e.g., this moment, "real time", or time frame such as minutes, etc.), as a population parameter (see include, but are not limited to, Goldman: figure 2, paragraphs 0027, 0052; Ellis: paragraphs 0107-0108; Thomas, paragraphs 0070-0076).

Regarding claim 4, Goldman in view Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman further discloses EPG transmission means for transmitting a latest EPG generated by the EPG generating means to a user of a user terminal (e.g., component for transmitting the updated/modified EPG generated by EPG generator to viewer of a user terminal - see include, but are not limited to, figures 2-6, paragraphs 0037-0039, 0042-0047, 0049, 0052).

Regarding claim 5, Goldman in view Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman in view of Ellis further discloses history data acquiring means for acquiring, as to individual users, history data which is a history of actions related to program viewing taken by each user (means for obtaining, or gathering viewing behavior, or viewing activity relating to associated program – see

Art Unit: 2424

include, but are not limited to, Goldman figures 2-6, paragraphs 0022, 0027, 0035-0040);

Goldman in view of Ellis further discloses the EPG generating means generates the EPG in which the program guide data, the statistical data, and the history data are superimposed (see include, but are not limited to, Goldman: figures 2-6, paragraphs 0022, 0027, 0035-0040, 0052-0054; Ellis: figures 20a-20b, paragraphs 0107-0109, 0112).

Regarding claim 6, the limitations that correspond to the limitations of claim 5 are analyzed as discussed in the rejection of claim 5, wherein the "operation data" corresponds to "history data" which is interpreted as activities information/usage data (see also, Goldman: paragraphs 0022, 0035-0040; Ellis: paragraphs 0107-0112).

Regarding claim 7, Goldman in view Ellis further discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman in view of Ellis further discloses the EPG generating means generates the EPG in which the program guide data is displayed in a different manner for different broadcast status of a program (see include, but are not limited to, Goldman: paragraphs 0011, 0035, 0049, 0052-0054; or Ellis: figure 7, paragraph 0109 - the program guide client indicate that a program is new to a household by, for example, displaying a suitable icon or changing the display characteristics of listing (e.g., changing its color).

Art Unit: 2424

Regarding claim 8, Goldman in view Ellis discloses the data processing apparatus as discussed in the rejection of claim 7. Goldman further discloses program guide data in different manner (see include, but are not limited to, paragraphs 0011, 0052-0054). However, Goldman does not explicitly disclose displaying different manners for a program which ended, a program which is being broadcast and a program which will be broadcast.

Ellis further disclose the EPG generating means generates the EPG in which the program guide data is displayed in different manner for a program which ended, a program which is being broadcast and a program which will be broadcast (e.g., display in different manner such as different color, with a icon, etc., for program was recorded, new program, and program scheduled for recording - see include, but are not limited to, paragraph 0109; E988: paragraphs 0125-0126, figures 11a-11b, 12a-12b, 18a-18f). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Goldman with the teaching as further taught by Ellis in order to allow the user to follow program status on the program guide screen easily.

Regarding claim 9, Goldman in view Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman further discloses the EPG couple be updated via Internet and the user terminal for displaying the EPG could be computer (paragraphs 0022, 0024, 0033, 0040, 0056, 0060, figure 6)). Thus, the EPG generated by EPG generating means is displayable by a web browser.

Alternatively, Ellis also discloses Ellis further discloses the EPG generated by the EPG generating means is displayable by a web browser (e.g., on line program guide displayable by a web browser – see include, but are not limited to, paragraph 0041; E988: paragraphs 0072, 0160).

Regarding claim 10, Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. The additional limitations that correspond to the additional limitation of claim 9 are analyzed as discussed in the rejection of claim 9, wherein "a dedicated browser" corresponds to "a web browser".

Regarding claim 11, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman further discloses aggregating means for aggregating information transmitted from user terminals of users and obtaining the statistical data (e.g., component such as upstream receiver/interface or processing at clearinghouse system or at local facility for collecting viewing information, statistical information, etc. from the user terminals - see include, but are not limited to, figures 2-6, paragraphs 0022, 0028, 0030, 0039, 0042);

wherein the statistical data acquiring means acquires the statistical data obtained by the aggregating means (e.g., data processing device/memory acquires the viewing data, activities data, etc. received by the upstream receiver/interface or processing circuitry at local facility or clearinghouse system -see include, but are not limited to, figures 2-6, paragraphs 0037, 0039, 0042-0044).

Regarding claim 12, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 11. Goldman further discloses information of viewer histories/activities are transmitted from the user terminal is information representing that a program is viewed during a broadcast time thereof, or information representing recorded program is viewed, etc. (see include, but are not limited to, paragraphs 0022, 0031, 0035, 0036).

Alternatively, Ellis also discloses the information transmitted from user terminals (e.g., user television equipments) is first information representing that a program is viewed during a broadcast time thereof (e.g., information of user viewing/watching a program in real time/during broadcast time), second information representing that a program recorded during a broadcast time thereof is viewed by playback (e.g., information collected in response to user action of recording a program and playback a recorded program), or third information representing that a program is scheduled for recording (see include, but are not limited to, paragraphs 0010, 0045, 0107-0110; Thomas: paragraphs 0050, 0055-0057, 0067, 0069; E988: paragraphs 0151-0153; E988: figures 12b, 18a-18f).

Regarding claim 13, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 12. Goldman in view of Ellis further discloses the first information includes information which specifies the program viewed by a user and a viewing date/time of the program (e.g. date and time of action, including program

Art Unit: 2424

viewed, was taken in the program guide may be monitored and appropriate information may be stored in data structure – see include, but are not limited to, Goldman:

paragraphs 0036-0037, 0022; Ellis: paragraphs 0055-0057);

the second information includes information which specifies a recorded program viewed by the user and a viewing date/time of the recorded program which uses a broadcast date/time of the recorded program viewed by the user as a reference (see include, but are not limited to, Goldman: paragraphs 0022, 0036-0037; E988: 0151-0153; Thomas, paragraphs 0055-0057);

the third information includes information which specifies the program which is scheduled for recording or whose recording is canceled, and information representing the recording schedule or cancellation thereof (e.g., information which specifies the program which is schedule for recording and information representing the recording schedule such as title, time, etc. - see include, but are not limited to, Goldman: paragraphs 0022, 0036-0037, 0039; E988: figures 11a-11b, 12a-12b, 18a-18f; Thomas: paragraphs 0055-0057).

Regarding claim 14, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 13. Goldman in view of Ellis further disclose the first and second information further include a good impression level representing how the users feel about the program (e.g., high number of viewers selected/viewed program, or strong like, week like, high demand, etc. - see include, but are not limited

Art Unit: 2424

to, Goldman: paragraphs 0022, 0052-0054; Ellis: figures 13a-13d; Thomas, paragraph 0070).

Regarding claim 15, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 13. Goldman in view of Ellis further discloses actual viewing date/time at which the user viewed the recorded program (see include, but are not limited to, Goldman: paragraphs 0022, 0036-0037, 0039, 0049, 0052-0054; E988: paragraphs 0151-0157; Thomas, paragraph 0055-0057).

Regarding claim 16, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 11. Goldman in view of Ellis further discloses the information transmitted from the user terminal includes date/time information about broadcast dates/times of the programs (see include, but are not limited to, Goldman: paragraphs 0022, 0036-0039, 0052-0054; Ellis: paragraph 0100-0104, 0109; E988: figure 18f; Knudson: figures 10, 13-16);

the aggregation means aggregates the information transmitted from the user terminals for predetermined time intervals on the basis of the date/time information included in the information (e.g., upstream receiver interface/ processing circuitry receives user information/viewer activities in predetermined time frame - see include, but are not limited to, Goldman: paragraphs 0027, 0031, 0034, 0036-0039; Ellis: paragraphs 0100-0104, 0108-0109, 0119, 0125; E988: figure 18f; Knudson: figures 10, 13-16).

Regarding claim 17, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 11. Goldman in view of Ellis further discloses the aggregation means sorts and stores the information transmitted from the user terminal by the users (e.g., the collected information is filtered/analyzed and stored in storage device - see include, but are not limited to, Goldman: paragraphs 0043, 0044, figures 2, 6; Ellis: paragraphs 0010, 0045, 0107, 0108, 0119, 0125; Thomas, paragraphs 0069-0075).

Regarding claim 18, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 11. Goldman in view of Ellis further discloses the aggregation means determines whether or not the information transmitted from the user terminals is valid, and takes only valid information for aggregation (e.g., analyzing, filtering less important data and taking only high important data or desired data - see include, but are not limited to, Goldman: paragraphs 0037, 0043, 0044; Ellis: paragraphs 0107-0112; Thomas: paragraphs 0069-0075).

Regarding claim 19, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 11. Goldman in view of Ellis further discloses the aggregation means aggregates the information transmitted from the user terminals for each of user attributes (e.g., user identifier, user profile, user demographic values, or



Art Unit: 2424

subscriber ID, etc. see include, but are not limited to, Goldman: paragraphs 0022, 0036-0037; Ellis: paragraphs 0107-0112, 0119, 0120; Thomas, paragraphs 0072-0073).

Regarding claim 20, Goldman in view of Ellis discloses data processing apparatus as discussed in the rejection of claim 11. Goldman in view of Ellis further discloses the information transmitted from the user terminals includes a good impression level representing how the users feel about a program (see discussion in the rejection of claim 14);

the aggregation means aggregates the good impression level for each of the programs (upstream receiver or processing circuitry aggregates the viewing behavior, viewing activity, or user preferences including strong like, weak like, etc. for each of the programs - see include, but are not limited to, figures 2-6, paragraphs 0022, 0036-0037, 0052-0054; Ellis: figures 2a-2d, 13a-13d, paragraphs 0089-0090, 0107-0112; Thomas: paragraphs 0069-0073).

Regarding claim 21, Goldman in view of Ellis discloses the data processing apparatus as discussed in the rejection of claim 1. Goldman in view of Ellis further discloses generating EPG in which the program guide data for one day is displayed on one page (e.g., from 800 to 9:30 of a day -see Goldman: figure 4; or the program guide server or EPG generating device at user television generates an EPG in which when the user selects day button or page up/page down, or day forward, day backward for the listing of a day (see include, but are not limited to, K387: paragraphs 0099-0101; E988:

Art Unit: 2424

paragraph 0072, and US 2003/0066085 (continuation of 08/938,028 which is incorporated by reference in its entirety in E988) figures 16-22, 26, paragraph 0103).

Regarding claim 22, the limitations of the method that correspond to the limitations of the apparatus of claim 1 are analyzed as discussed with respect to the rejection of claim 1.

Regarding claim 23, the limitations of the computer readable storage medium that correspond to the limitations of the apparatus of claim 1 are analyzed as discussed in the rejection of claim 1. Goldman further discloses the computer readable storage medium for storing instructions being executed by a set top box or other computer to perform all functions (paragraphs 0023-0024). It would have been obvious one of ordinary skill in the art to embody the procedures of the method disclosed by Goldman in view of Ellis as discussed in the rejection of claim 1 in a "computer readable storage medium" in order that the functions are performed automatically by a processor.

Regarding claim 24, the limitations that correspond to the limitations of claim 1 are analyzed as discussed in the rejection of claim 1. Goldman further discloses a server (e.g., signal source, network or clearinghouse system) for transmitting information (figures 1-6); and a user terminal (e.g., home entertainment system, television set, set top box, etc.) for receiving information from the server (see include, but are not limited to, figures 1-6, paragraphs 0022, 0029-0034, 0042).

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yasukawa (US 7,047,550) discloses system for processing program information.

Sai et al. (US 6,822,661) discloses information display control apparatus and method.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON P. HUYNH whose telephone number is (571)272-7295. The examiner can normally be reached on 9:00 - 6:30.

Art Unit: 2424

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son P Huynh/  
Primary Examiner, Art Unit 2424

April 6, 2010